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On July 10, 2006

TOWNSEND and TOWNSEND and CREW LLP

By: 

Lata Olivier

PATENT  
Attorney Docket No.: 019633-000117US  
Client Reference No.: NRC00072.1

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JUL 10 2006

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

GILBERT and WAKARCHUK

Application No.: 10/734,719

Filed: December 11, 2003

For: NUCLEIC ACIDS ENCODING  
SIALYTRANSFERASES FROM C.  
JEJUNI

Confirmation No.: 2376

Examiner: : Sheridan Swope

Art Unit: 1656

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR §1.97 and  
§1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. In accordance with 37 CFR §1.98(d), copies of the references can be found in Application No. 09/816,028, filed March 21, 2001 (Attorney Docket No. 019633-000111US). It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

GILBERT and WAKARCHUK  
Application No.: 10/734,719  
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representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement.

However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

  
Beth L. Kelly  
Reg. No. 51,868

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60118484 v1

PTO/SB/08A (08-03)

Substitute for form 1448A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete If Known</b>	
		Application Number	10/734,719
		Filing Date	December 11, 2003
		First Named Inventor	Gilbert, Michel
		Art Unit	10/734,719
Examiner Name	Sheridan Swope	Attorney Docket Number	019633-000117US
Sheet	1	of	3

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	AA	US-5,352,670	10-04-1994	Venot et al.	
	AB	US-5,374,541	12-20-1994	Wong et al.	
	AC	US-5,545,553	08-13-1998	Gotschlich	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	AD	WO	92/16840		10-01-1992	The Scripps Research Institute		<input type="checkbox"/>
	AE	WO	96/32491		10-17-1996	Cytel Corp.		<input type="checkbox"/>
	AF	WO	99/49051	A1	09-30-1999	National Research Council of Canada		<input type="checkbox"/>
	AG	WO	00/46379	A1	08-10-2000	Gilbert et al.		<input type="checkbox"/>

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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PTO/SB/08B (08-03)

Substitute for form 1449B/PTO		<b>Complete if Known</b>	
		<i>Application Number</i>	10/734,719
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<i>Filing Date</i>	December 11, 2003
		<i>First Named Inventor</i>	Gilbert, Michel
		<i>Art Unit</i>	2376
		<i>Examiner Name</i>	Sheridan Swope
(use as many sheets as necessary)		<i>Attorney Docket Number</i>	019633-000117US
Sheet	2	of	3

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AH	ASPINALL et al.; "Chemical Structures of the Core Regions of Campylobacter Jejuni Serotypes O:1, O:4, O:23, and O:36 Lipopolysaccharides"; <u>European Journal of Biochemistry</u> ; May, 1993; pp. 1017-1027; Vol. 213, No.3.	
	AI	ASPINALL et al.; "Lipopolysaccharides from <i>Campylobacter jejuni</i> Associated with Guillain-Barre Syndrome Patients Mimic Human Gangliosides in Structure"; <u>Infect. Immun.</u> ; 1994a; pp. 2122-2125; Vol. 62.	
	AJ	ASPINALL et al.; "Lipopolysaccharides of <i>Campylobacter jejuni</i> Serotype O:19: Structures of Core Oligosaccharide Regions from the Serostrain and Two Bacterial Isolates from Patients with the Guillain-Barre Syndrome"; <u>Biochemistry</u> ; 1994b; pp. 241-249; Vol. 33.	
	AK	ASPINALL et al.; "Lipopolysaccharides of <i>Campylobacter jejuni</i> Serotype O:19: Antigen Chains from the Serostrain and Two Bacterial Isolates from Patients with the Guillain-Barre Syndrome"; <u>Biochemistry</u> ; 1994c; pp. 250-255; Vol. 33.	
	AL	BELUNIS et al.; "Biosynthesis of Endotoxin"; <u>J. Biol. Chem.</u> ; 1992; pp. 9989-9997; Vol. 267.	
	AM	GAUDINO et al.; "A Novel and Efficient Synthesis of Neolacto Series Gangliosides 3'-nLM <sub>1</sub> and 6'-nLM <sub>1</sub> "; <u>J. Am. Chem. Soc.</u> ; 1994; pp. 1149-1150; Vol. 116.	
	AN	GILBERT et al.; "Biosynthesis of Ganglioside Mimics in <i>Campylobacter jejuni</i> OH4384"; <u>The Journal of Biological Chemistry</u> ; February 11, 2000; pp. 2898-3908; Vol. 275, No. 6; The American Society for Biochemistry and Molecular Biology, Inc.; USA.	
	AO	GILBERT et al.; "Cloning of the Lipooligosaccharide $\alpha$ -2,3-Sialyltransferase from the Bacterial Pathogens <i>Neisseria meningitidis</i> and <i>Neisseria gonorrhoeae</i> "; <u>J. Biol. Chem.</u> ; 1996; pp. 28271-28276; Vol. 271.	
	AP	GILBERT et al.; EMBL Acc# AY044868 2002. Alignment with SEQ ID NO: 3.	
	AQ	ITO et al.; "Synthesis of Bioactive Sialosides"; <u>Pure Appl. Chem.</u> ; 1993; p. 753; Vol. 65.	
	AR	KUROKI; " <i>Campylobacter jejuni</i> Strains from Patients with Guillain-Barre Syndrome Belong Mostly to Penner Serogroup 19 Contain $\beta$ -N-Acetylglucosamine Residues"; <u>Ann. Neurol.</u> ; 1993; pp. 243-247; Vol. 33.	
	AS	PARKHILL et al.; "The Genome Sequence of the Food-Borne Pathogen <i>Campylobacter jejuni</i> Reveals Hypervariable Sequences"; <u>Nature</u> ; February 10, 2000; pp. 665-668; Vol. 403.	
	AT	PENNER et al.; "Diversity of Lipopolysaccharide Structures in <i>Campylobacter jejuni</i> "; <u>The Journal of Infectious Diseases</u> ; December, 1997; pp. S135-S138; Vol. 176, No. 2.	
	AU	PRENDERGAST et al.; "Lipopolysaccharides from <i>Campylobacter jejuni</i> O:41 Strains Associated with Guillain-Barre Syndrome Exhibit Mimicry of GM1 Ganglioside"; <u>Infection and Immunity</u> ; August 1998; pp. 3849-3877; Vol. 66, No. 8.	
	AV	PRESTON et al.; "The Lipooligosaccharides of Pathogenic Gram-Negative Bacteria"; <u>Critical Reviews in Microbiology</u> ; 1996; pp. 139-180; Vol. 22, No. 3.	
	AW	SABESAN et al.; "Combined Chemical and Enzymatic Synthesis of Sialyloligosaccharides and Characterization by 500-MHz <sup>1</sup> H and C NMR Spectroscopy"; <u>J. Am. Chem. Soc.</u> ; 1986; pp. 2066-2080; Vol. 108.	

Examiner Signature	Date Considered
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		Art Unit	2376		
		Examiner Name	Sheridan Swope		
Sheet	3	of	3	Attorney Docket Number	019633-000117US

AX	SALLOWAY et al.; "Miller-Fisher Syndrome Associated with <i>Campylobacter jejuni</i> Bearing Lipopolysaccharide Molecules that Mimic Human Ganglioside GD"; <i>Infect. Immun.</i> ; 1998; pp. 2945-2949; Vol. 64.	
AY	WAKARCHUK et al.; "Functional Relationships of the Genetic Locus Encoding the Glycosyltransferase Enzymes Involved in Expression of the Lacto-N-neotetraose Terminal Lipopolysaccharide Structure in <i>Neisseria meningitidis</i> "; <i>J. Biol. Chem.</i> ; 1998; pp. 19168-19173; Vol. 271.	
AZ	WOOD et al.; "Cloning, Mutation and Distribution of a Putative Lipopolysaccharide Biosynthesis Locus in <i>Campylobacter jejuni</i> "; <i>Microbiology</i> ; February 1989; pp. 379-388; Vol. 145, No. 2.	

Examiner Signature		Date Considered	
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<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.

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